

Specification For Loft Conversion @ 82 Ferme Park Road, London

1 - ELECTRICAL WORK

Provide socket outlets and lighting points to client's instructions. All wiring and electrical work to be designed, installed, inspected and tested in accordance with the requirements of BS7671, the IEE 17th Edition Wiring Guidance & Building Regulations' Part P (Electrical Safety) by a member of the Competent Person Scheme operated by NICEIC or equivalent. Within 30 days of work being completed the Competent Person's organisation to notify the Local Authority that a self certification certificate has been issued to the client, and that the Installer has issued a BS7671 Electrical Installation Test Certificate to the client.

NB At least 75% of new light fittings to be compact fluorescent light fittings or LEDs [i.e. lamps having a luminous efficacy of at least 40 lumens per circuit – Watt (taking account of power consumed by lamps and their associated control gear and any power factor correction equipment)]

2 - FLASHINGS

All flashings to be Code 4 lead, 150mm high and chased min 25mm into walls and fixed with lead wedges. Flashings to pitched roofs to be stepped as necessary.

3 - FLAT ROOF (COLD DECK)

13mm Bitumen bedded spa chippings on three layers High performance built up roofing felt to BS 747: 1977 comprising 1st layer of type 3G perforated felt partly bonded, 2nd layer of Anderson's HT 125 sheeting fully bonded, and 3rd (cap sheet) layer of Anderson's HT 350 sheeting fully bonded, all laid in with the recommendations of CP144: Part 3 1970. Roof deck to be 19mm WBP plywood on firrings laid at a 1:40 fall. Roof joists to be cross ventilated with min. gap between fascia and wall to be 25mm). Roof joists to be grade C16 timber 200 x 50mm at 400 c/c. 150mm Kingspan insulation to be laid between joists with 25mm Kingspan insulated plasterboard and skim.

4 - SLOPING CEILINGS

Provide 50 x 50mm battens below the existing rafters, fill between the rafters with 100 mm Kingspan rafters with a further 70mm on the underside with 12.5mm plasterboard and skim finish provided internally. This will maintain 50mm ventilation gap above the insulation.

5 – 2nd FLOOR

Provide tongue and groove flooring on 200 x 50mm C24 floor joists at 400 centres (to engineers spec) supported in hangers throughout. Floor joists to be supported in Simpson Strong tie hangers off existing walls and all trimmers. Ceiling under to 1no layer 12.5mm Wallboard Ten plasterboard with skim finish. Provide 100 fibreglass quilt between joists. Strap existing ceiling to the new floor joists. Follow engineers design for timber beams and trimmers.

6 - DORMER WALLS AND CHEEKS

To be 125 x 50mm studwork with plain tile hanging on 47x25mm battens on Tyvek Supra on 12.5mm plywood bracing externally. The void is to be infilled with 120mm Kingspan insulation. Internally finish the walls with skim finished 12.5mm Duplex. Provide Code 4 lead flashings at all abutments. Provide 6mm Supalux fire board to the external face of the dormer within 1m of the boundary.

7 - PARTITION WALLS

To be 100 x 50mm vertical studs @ 400mm c/c with 100 x 50mm head and sole plates lintols. Provide 100 x 50 mm horizontal noggins @ 800mm c/c vertically. 12.5mm Soundbloc plasterboard and skim finish to both sides, void infilled with sound deadening quilt. Partitions to be constructed off double joists where necessary (bolted at 600mm c/c using M12 bolts).

8 - LINTOLS

All new external wall lintels (except if noted differently on plans) to be suitable CATNIC type, all with min 150mm end bearings.

9 - LATERAL RESTRAINT

Where walls run parallel with roof, floor or ceiling joists, provide 30 x 5mm galvanised mild steel straps at 1800mm centres (or as shown), built into walls and taken over min 3no joists with solid bridging under straps. 100 x 50 mm wall plates to be strapped to walls with 30x5mm galvanised straps at 1800mm centres. Provide herringbone strutting to floor, ceiling and roof joists at mid span.

10 - WINDOWS/DOORS

All glass in windows and doors to be 28mm sealed argon filled low 'e' glass double glazed units capable of achieving a max U value of 1.4. Glazing in doors or within 300mm of any door, or within 800mm of floor or ground level to be laminated or toughened safety glass to BS6206. All windows to have easy clean hinges to permit cleaning from within, and at least one window in each room to have a view to the outside. All to be agreed with Local Authority Surveyor. All windows and doors to be securely fixed to the structure as shown and shall be sealed at all junctions to prevent air leakage or rain penetration. Windows - doors to be designed, constructed and installed in order to be fit for purpose given the width and height of any opening shown. If additional supports/bracing are required then this must be clearly identified before any manufacture takes. All windows to be effectively mastic sealed to prevent any water penetration.

11 - WASTE PLUMBING

Plumbing to be in accordance with BS5572. Waste pipes to be in uPVC with solvent welded joints, sizes to be as follows:-

Common wastes	50mm Ø	Bath	38mm Ø
Sinks	38mm Ø	Showers	38mm Ø
Bidets	38mm Ø	Basins	32mm Ø

All appliances to be fitted with 75mm deep seal traps. Vertical soil and vent pipes to be 100mm dia uPVC. SVP to be taken up 900mm above and ventilation opening within 3.0m and fitted with wire balloon. Long radius bends and rodding accesses to be provided at the bottom of SVP's. Rodding access to be provided at all waste pipe changes of direction.

12 - SURFACE WATER DISPOSAL

Rainwater goods to be PVC. Gutters to be 112mm Ø half round. Rainwater pipes to be 63mm Ø. Rainwater to discharge to existing combined drain as shown. All gutters to remain within site boundaries.

13 - VENTILATION

All rooms to be provided with windows having an opening area in excess of 5% floor area, and at least one window in each room to have a 8000mm² trickle ventilator.

14 - CENTRAL HEATING, HOT & COLD WATER SUPPLIES

Extend Hot & Cold supplies as required ensuring that all supplies to consist only of wholesome water and all baths to be fitted with thermostatic valves so that the hot supply does not exceed 43

deg C. Extend existing central heating system to serve new radiators (provided with thermostatic valves) having checked that existing boiler has sufficient capacity. Where found necessary provide Gas Safe installed 'Worcester Bosch combination condensing wall mounted boiler (SEDBUK A or B) – location to be agreed on site to avoid plumbing (e.g. if on a wall facing a boundary then wall must be min 2.5m from boundary). Condensate drain to foul water gully. If Boiler to have a balanced flue then provide a cage guard. Any unvented cylinder (E.g. Megaflow) shall be mounted on a stable platform that extends min 150mm beyond cylinder and be fitted with 3no safety cut out & pressure relief valves and signage that clearly displays the name of the installer. All pressure relief valves to discharge in a safe place. Boiler condensate to discharge to a foul water drain. Boiler installer to fix a durable notice in compliance with Part J1-J4 of the Building Regulations

15 - STAIRWAYS

Rise to be 209.25 mm, going to be 232.4 mm, pitch to be not greater than 42°. Width to be min 800mm between handrails. Handrail to be min 900mm above pitch line. Vertical headroom to be min 2000mm above pitch line. Provide vertical ballustrading beneath handrail with no gap greater than 95mm. All tapered treads to have an equal rate of taper, and min going of 50mm.

STAIRWAY DIMENSIONS TO BE CAREFULLY CHECKED ON SITE BEFORE ANY ORDER FOR MANUFACTURER IS MADE

16 -FIRE PRECAUTIONS

Provide mains powered interlinked smoke detectors with battery back up at each level of the stairwell and within 7.5m of any door.. All doors except WC and bathroom to be 30 minute fire resistant. The under stairs is to be lined to achieve 30 minute fire resistance. All doors located off of the stairway are to be FD30 doors with intumescent strips. Under draw stair with 30 minute fire construction.

17 - GENERAL

All work to be carried out in a workmanlike manner, and to be in full compliance with the Building Regulations 2010 (as amended), and all current British Standards' Codes of Practice and all materials to be used in strict compliance with manufacturers requirements. The contractor to ensure that existing structure is adequately propped, under the supervision of a properly qualified and experienced person, where new openings are formed in existing walls, and that props remain in place until new beams top flange packing and bearings have reached working stresses. Owner & Builder to serve all necessary notices on adjoining neighbours as required by the 1996 Party Wall Etc. Act minimum 2 months prior to work commencing unless informal written agreements have been obtained for the work to proceed. All disturbed finishes to be made good to match existing. No part of new structure to be constructed

over any boundary without the written consent of adjoining owners. Internal finishes to client's specification unless otherwise stated. All door architraves, skirtings, etc. to match existing unless otherwise directed by the client. Client to agree the type, quality, and manufacturer of fixtures and fittings. All debris and surplus materials to be cleared off site, and disposed of in an approved manner, on completion of works. The disposal of materials shall be carried out in such a way as to ensure that no pollution or nuisance of any kind is caused. The contractor must carefully check the outfall of all drainage works affected by the proposals prior to works commencing in order to ensure that the work will not cause, or lead to pollution of any kind. No liability will be accepted by the designer for claims arising out of pollution, contamination or nuisance of any kind. Trenches to be excavated under the supervision of a properly qualified and experienced person and to be properly supported with sheet piling to prevent collapses. Prior to any excavation taking place the entire area to be checked for buried services using a locating device and in accordance with HSE guidance. Nobody is to enter an unsupported trench for whatever reason. All machinery used on site to be checked before use to ensure that it is safe to use. The contractor to ensure that all machinery is used under the supervision of a properly qualified and experienced person. The contractor must also ensure that all materials are safely stored and are used strictly in compliance with the manufacturer's requirements, taking great care to provide and train workers in the use of safety equipment (e.g. hard-hats, goggles, gloves, overalls, etc.) Materials that require good ventilation must not be used in confined spaces. Suitable first aid equipment to be made available on site at all times including washing facilities eye baths etc. Scaffolding to be erected and checked each day by a properly qualified and experienced person. All ladders accessing scaffolds to be tied. All scaffolds to be erected in strict compliance with the British Standard Code of Practice. No materials to be taken up ladders - in all cases use a properly installed and inspected hoist. All persons entering the site to wear adequate clothing to satisfy Health and Safety Regulations (e.g. Hard-hats, foot protectors, etc.) Where the work is likely to employ more than 4 workers or last longer than 30 days or involve more than 500 man days and where the client is not a Domestic Client, then a Safety Planning Supervisor should be appointed. Client to ensure that all Tenderers to receive the same information when preparing quotations. **These drawings are prepared for the purpose of acquiring Local Authority consent only – further details may be required for construction**

DO NOT SCALE DRAWING - IF IN DOUBT, ASK.

ALL DIMENSIONS AND DETAILS TO BE CHECKED ON SITE
PRIOR TO ANY WORK COMMENCING AND ANY
DISCREPANCIES TO BE REPORTED FOR AMENDMENT.

THIS DRAWING TO BE READ IN CONJUNCTION WITH
DRAWINGS 1 - 3 AND STRUCTURAL CALCULATIONS

18 - CONTINUITY OF INSULATION AND AIR TIGHTNESS

The building fabric should be constructed so that there are no reasonably avoidable thermal bridges in the insulation layers caused by gaps within the various elements, at the joints between elements and at the edges of elements such as those around window and door openings. Reasonable provision should also be made to reduce unwanted air leakage through the new envelope parts. Reasonable provision would be to adopt design details such as those set out in the TSO Robust Details catalogue (www.est.org.uk). Provide 25mm Kingspan floor insulation vertically around perimeter of new floor at abutment of external walls. Provide Thermabate vdp and cavity wall closers in all reveals and ensure part of all window frames overlap with these closers. In order to prevent unwanted air leakage and infiltration around all new windows (no new external doors) provide expanding foam seal between all four sides of window frame and timber carcasing. Then provide mastic seal to junction of plasterboard linings with window frame / window board and also externally between window frame and aluminium soakers. In dry-lining applications, inject continuous ribbons of expanding polyurethane foam between the plasterboard sheets and the inner leaf blockwork: this will prevent air leakage into this space from the void between the ceiling first floor, or from internal partition walls. Drill small holes (approximately 9mm) at regular intervals (approximately every 100mm) around the edges of the plasterboard to allow the foam to be injected into the void. Make good damage to mortar joints and fill any holes in the external walls. If the dwelling has been extended and the kitchen/bathroom has been moved to a new location, make sure there are no holes through the external walls where service pipes were previously located. Seal gaps around service pipes and the cables that pass through external walls, ceilings and ground floors. It may be necessary to remove baths, kitchen units, boxing around service pipes, washing machines, etc, to gain access to these pipes and cables. Ensure there is a good seal around boiler flue pipes where they pass through the external wall/ceiling. Check the performance of the sealing material to ensure it will not be affected by heat. The airtightness of suspended timber floors can be improved by laying hardboard sheeting over the top, to cover any gaps between the floorboards. Seal around the edges of the rooms and make good any gaps in the floor around service pipes (it is advisable to check for holes behind baths and under shower trays).

19 - CDM REGULATIONS

The Building Owner to fully comply with the CDM Regulations 2015 and appoint the Principal Contractor in order that they should manage the risks on site. The Principal Contractor shall carry out a risk assessment of the proposed work and liaise with the designer before works commence if there is any doubt as to being able to complete the project in a safe way compliant with the CDM Regulations 2015. All construction risks must be assessed and managed including the following (this list is not exhaustive):

Falls from height: - Make sure ladders are in good condition, at a

1:4 angle and tied or footed. - Prevent people and materials falling from roofs, gable ends, working platforms and open edges using guardrails, midrails and toe boards. Make sure fragile roof surfaces are covered, or secure working platforms with guard rails are used on or below the roof. Scaffolding to be erected and checked each day by a properly qualified and experienced person. All ladders accessing scaffolds to be tied. All scaffolds to be erected in strict compliance with the British Standard Code of Practice. No materials to be taken up ladders - in all cases use a properly installed and inspected hoist.

Collapse of excavations: - Shore excavations; cover or barrier excavations to prevent people or vehicles from falling in. Trenches to be excavated under the supervision of a properly qualified and experienced person and to be properly supported with sheet piling to prevent collapses. Prior to any excavation taking place the entire area to be checked for buried services using a locating device and in accordance with HSE guidance. Nobody is to enter an unsupported trench for whatever reason.

Collapse of structures: - The contractor to ensure that existing structure is adequately propped, under the supervision of a properly qualified and experienced person, where new openings are formed in existing walls, and that props remain in place until new beams top flange packing and bearings have reached working stresses.

Exposure to building dusts: - Prevent dust by using wet cutting and vacuum extraction on tools; use a vacuum cleaner rather than sweeping; use a suitable, well-fitting mask.

Exposure to asbestos: - Do not start work if it is suspected that asbestos may be present until a demolition/refurbishment survey has been carried out.

Materials:- The contractor must ensure that all materials are safely stored and are used strictly in compliance with the manufacturer's requirements. Materials that require good ventilation must not be used in confined spaces.

Electricity: - Turn the electricity supply and other services off before drilling into walls. - Do not use excavators or power tools near suspected buried services.

Use of machinery:- All machinery used on site to be checked before use to ensure that it is safe to use. The contractor to ensure that all machinery is used under the supervision of a properly qualified and experienced person.

Protect members of the public, the client, and others: - Secure the site; net scaffolds and use rubbish chutes. Discuss with your builder before work starts and throughout the build how these risks are being managed.

Allow adequate time: - Work that is rushed is likely to be unsafe and of poor quality. Allow enough time for the design, planning and construction work to be undertaken properly.

Provide information to your contractor:- Your designer and builder will need information about what you want built, the site and existing structures or hazards that may be present such as asbestos, overhead cables, and buried services. Providing this information at an early stage will help them to plan, budget and work around problems.

Ensure adequate welfare facilities on site:- Make sure that your contractor has made arrangements for adequate welfare facilities for

their workers before the work starts, including WC and washing facilities eye baths etc. See the HSE publication Provision of welfare facilities during construction work. Suitable first aid equipment to be made available on site at all times. The contractor must take great care to provide and train workers in the use of safety equipment (e.g. hard-hats, goggles, gloves, overalls, foot protectors etc.)

All persons entering the site to wear adequate clothing to satisfy Health and Safety Regulations

Ensure a construction phase plan is in place:- The principal contractor has to draw up a plan explaining how health and safety risks will be managed. This should be proportionate to the scale of the work and associated risks and you should not allow work to start on site until there is a plan.

Keep the health and safety file:- The Principal Contractor should provide this at the end of the build the. It is a record of useful information which will help you manage health and safety risks during any future maintenance, repair, construction work or demolition. You should keep the file, make it available to anyone who needs to alter or maintain the building, and update it if circumstances change.

Protecting members of the public:- (including any employees) If you have members of the public visiting your premises (including employees), you need to be sure that they are protected from the risks of construction work. Discuss with your contractor how the construction work may affect how your premises are accessed e.g. you may have to re-route pedestrian access; make sure signs to your entrance are clear; or change the way your deliveries operate.

Larger Projects: For some construction work (work lasting longer than 30 days with more than 20 workers working at the same time, or involving 500 person days of work), you need to notify HSE of the project as soon as possible before construction work starts